

What is claimed is:

1. In an information distribution system comprising server equipment providing content to subscriber equipment via a communications channel, 5 server apparatus comprising:

10 a switch, for multiplexing each of a plurality of content streams provided by respective server modules to produce an output stream for transport via said communications channel;

15 said switch receiving non-content data from a data source and responsively multiplexing said non-content data into said output stream on a bandwidth availability basis.

20 2. The server apparatus of claim 1, wherein said switch comprises a data buffer for storing said non-content data, said apparatus further comprising:

25 a switch controller, for determining a bandwidth utilization level of said switch and responsively causing at least a portion of the contents of said data buffer to be multiplexed into said output stream when said bandwidth utilization level falls below a threshold utilization bandwidth level.

30 3. The apparatus of claim 2, wherein said threshold bandwidth utilization level comprises a utilization level sufficient to process a single time extent, said content streams being divided into a plurality of respective time extents.

35 4. The apparatus of claim 2, wherein:

40 each of said content streams provided by said server modules to said switch is divided into a plurality of respective time extents; and

45 said switch is capable of multiplexing a predefined number of time extents into said output stream.

50 5. The apparatus of claim 4, wherein said bandwidth availability is determined by determining a maximum number of extents capable of being multiplexed by said switch, determining an actual number of extents needed

to be multiplexed by said switch, and defining a difference between said maximal and actual amount of extents to be multiplexed by said switch as an available bandwidth of said switch.

- 5 6. The apparatus of claim 5, wherein said data within said data buffer is multiplexed into said output stream in place of extents which are not provided by said server modules, said data in said buffer being divided into extent size data portions.
- 10 7. The apparatus of claim 1, wherein said non-content data comprises control data and non-control data, said switch preferentially multiplexing said non-content control data over said content data.
- 15 8. The apparatus of claim 1, wherein said non-content data comprises control data and non-control data, said switch preferentially multiplexing said non-content control data over said content data, said switch preferentially multiplexing said non-content control data over said non-content non-control data.
- 20 9. The apparatus of claim 7, wherein said non-content data comprises control data and non-control data, said switch preferentially multiplexing said non-content control data over said content data, said switch preferentially multiplexing said non-content control data over said non-content non-control data.
- 25 10. In an information distribution system comprising a switching module for multiplexing a plurality of content streams provided by a respective plurality of server modules, a method for incorporating non-content data into said output stream, said method comprising the steps of:
 - 30 multiplexing each respective content stream portion together to produce an output stream;
 - determining if any portion of available bandwidth is not being utilized; and

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multiplexing into said output stream non-content data in place of content data that is not required to be multiplexed.